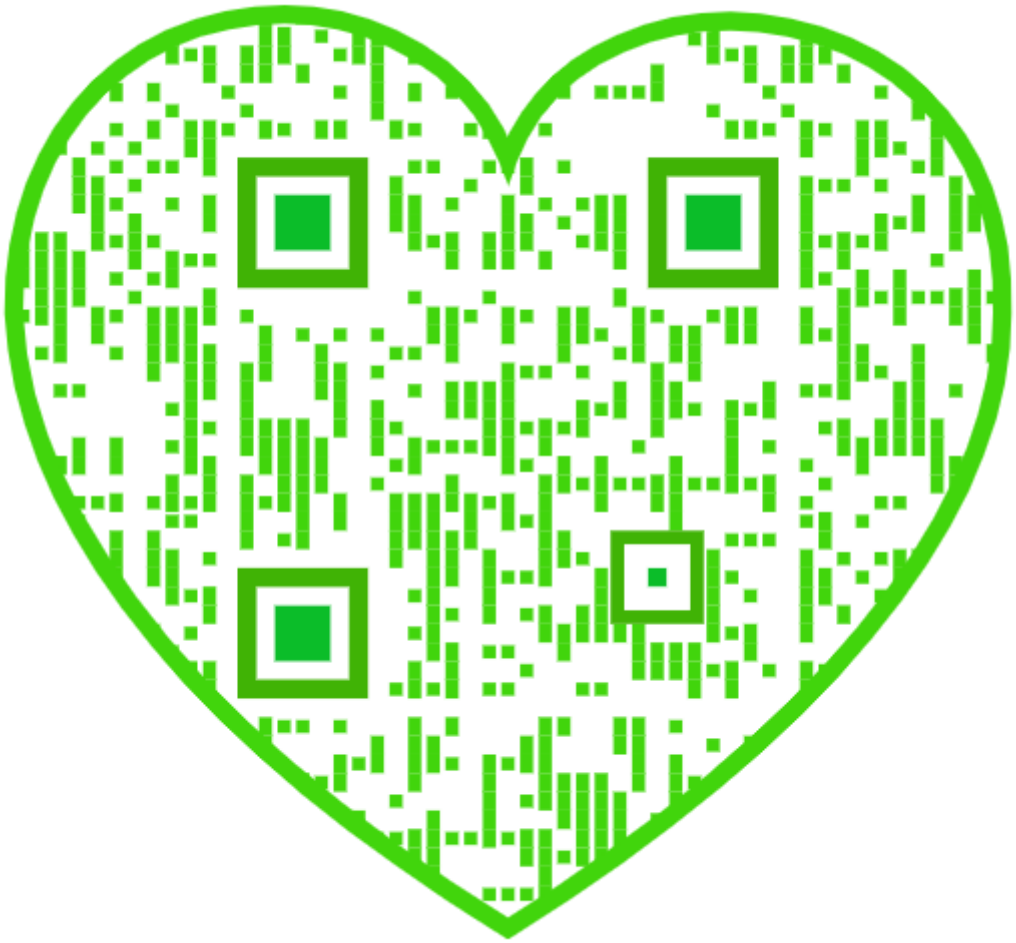

ROOF AND SIDE-WALL

PAINTING,

WITH FULL INSTRUCTIONS.

ALSO,

HOW TO MAKE LANGHORNE'S ENGLISH GUM-COATING AND OTHER MINERAL PAINTS AND CEMENTS.

BY

MAURICE LANGHORNE, OF MAYSVILLE, KY.,

Late President Roof-Painters' Company.

This Paint is used by the United States Government.

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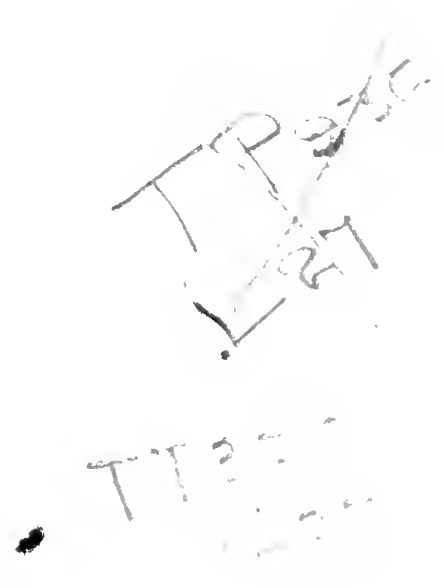

PREFACE.

My experience with houses has been, that the owners are compelled yearly to bear heavy expenses for repairs, which in some instances eat up almost the entire profits. Particularly is this the case in the matter of roof painting, and side-wall painting to prevent dampness.

My object is to show house-owners how to save from one-half to two-thirds of this expense.

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ROOF PAINTING.

AVOID lightning-rod men, or men who take up the business of roof painting in connection with some other calling, and particularly avoid all traveling roof painters.

The reasons for this are apparent to an expert. For after your roof is painted you will find that there is something the matter with your lightning rod which you did not know of before, and which you now have to have repaired. If you are so fortunate as to get a good job of roof painting, and no damage to any other part of your premises, your neighbor may soon find his roof leaking, or his lightning rod needing repairs. Especially is this the case if his roof adjoins yours, and *vice versa* if he employs them and your roof adjoins his.

If you do not know any poor man who is a journeyman painter, put an advertisement in some of the papers, costing fifty cents, that you want a house painter out of employment to paint your roof or side-wall, and you will be enabled to increase your acquaintance with this class of workmen.

Now, buy the materials stated on page 7 of this book, and avoid all highly-advertised or high-priced articles.

The largest experience has shown, that, for the painting of metallic surfaces, or bricks, stone, and outside wood work, nothing has ever proved more efficacious than the two compounds of linseed oil, varnish, and metallic hereinafter set forth.

Men with an extraordinary development of chin muscles, or on the lookout for a job, may talk you to death,

or show you a thousand references as to the merits of their particular paints; but if your judgment does not convince you that these two compounds are the best, refer the matter to some painter of intelligence that you *know* is disinterested, and he will tell you that experience justifies my statement.

To get the exact measure of your roof, measure (if house is by itself) from the lower edge of the barge board (the strip of board running along the side of the house from the roof) to the lower edge of the barge board on the other side; then from the upper edge of the cornice in front to the end of the tin in the gutter. This is the proper length and breadth of the roof.

For the joints, each of which is an inch high, and both sides of them have to be painted, and for the gutter inside and out, and the outside of the down spout, allow one-tenth of the whole roof measure. Thus:

Length	33	feet
Width	20	"
This makes	660	sq. ft.
One-tenth for gutter, joints, and spout	66	" "
Number of square feet in roof	726	

At two cents per square foot, the price charged by some to paint this roof, it would cost	$14.52
At one and a half cents, would cost	10.89
At one cent, would cost	7.26

While the cost is about as follows:

One gallon best raw linseed oil	.70
Six pounds of mineral @ 3 cents	.18
Other ingredients	.25
One flat brush (6 inch)	1.00
Labor of one man one day	1.25
Total	$3.38

This is allowing for best materials, bought at retail priees; and you can readily see why the roof painters can afford to take one's note *without* interest, and wait three, six, and nine months for their pay.

So that if you have only two houses of your own, or one large house, you can well afford to pay the price of this book, and make the saving on a single job of roof painting, and be ever afterwards freed from a set of incessant talkers who amount to little less than swindlers.

For a better illustration:

Take a roof measuring thirty squares, or three thousand square feet; at two cents a foot, this will cost		$60.00
At one and a half cents		45.00
At one cent		30.00
Get a seven or eight gallon can, costing (with mouth three inches wide)	$1.25	
One flat six-inch brush	1.00	
Four gallons best raw linseed oil, at average price of 70 cents	2.80	
Twenty-four pounds mineral @ 3 cents per pound	.72	
One half gallon copal varnish	1.00	
Labor of one man two days at $1.25	2.50	
Total		$9.27

These materials when mixed will make about six gallons of paint, amply sufficient for a roof of that size. And you have your can and brush left.

The brush, if kept in a bucket of water, will answer for a dozen jobs. The ordinary wooden bucket usually about a house, eosting twenty-five cents each, will answer to pour the paint into for use; and if you have to buy a seven or eight gallon tin can to hold and mix it in, you will have the can, bucket, and brush for subsequent use,

though generally old things of some kind can be found about every house to answer for these purposes without buying.

If your house is small, get your neighbor to join you in painting; and recollect, that a roof which leaks does not always *need* painting; and that when you paint, and there is any left, it is equally good for walls, fences, brick, stone, or wood.

In relation to side-wall painting to prevent dampness.

There are two ways of mixing the paint—one as above, which would require three or four coats, or by putting *eight pounds* of mineral to the gallon of oil, and only using two coats of paint.

Either way, after the first coat is put on go over the wall and cement all the cracks in the mortar and bricks which let the water in. This cement is made by taking, if the wall will measure seven or eight hundred square feet, a half gallon of the paint and stirring well into it enough of the dry mineral to thicken it up to the consistency of soft dough or soft putty.

For the purpose of applying it to the crevices in the wall, some use their fingers, some a trowel, others a knife. The first is the best. Be sure that all the crevices are well filled; and when putting the second coat on, the brush and paint going over the cement will smooth it down and help to fill other crevices.

The first coat should always be applied freely, and, in the case of thin paint being used, ample time should be allowed for the third and fourth coats to dry.

This cement is also used to stop leaks in metal roofing, and for an ordinary-sized roof only about a pint of the paint should be thickened up as above described.

How to make English Gum Coating Paint and Cement, believed to be the best.

Take a seven or eight gallon tin can. with mouth at least three inches in diameter; put into it four gallons of best *raw* linseed oil; put the can on a stove, and as soon as the oil begins to get warm, say lukewarm, stir into it one half gallon of good copal varnish, a pint of varnish to the gallon of oil; now stir in well the dry mineral, twenty or twenty-four pounds; that is, at the rate of five or six pounds to the gallon of oil.

(If the paint is for a wall, where you desire to make two coats answer, you should put in at least eight pounds of dry mineral to the gallon of oil.)

This should be so well stirred that there will be no lumps left in it, and before reaching the boiling point take it off the fire. After taking off, the stirring may be continued. You cannot mix it too well.

How to make Mineral Paint.

You need no fire or varnish; and mix the oil and minerals in the proportions before given.

As to the minerals to be used, there is scarcely any choice to be made on the ground of one lasting longer than another, if made and applied with the same care. And I give the names of a number:

French ochre, dry.	Cleveland iron paint, dry.
Prince's metallic, dry.	Richmond iron paint, dry.
Pittsburgh iron paint, dry.	Spanish brown, dry.
Yellow ochre, dry.	And numerous others.

These minerals can be bought, at wholesale prices, from three-quarters of a cent to two cents a pound, and ought to retail in small quantities at three cents, or less.

It ought to be noted here, that in warm climates—say

south of Philadelphia—yellow or French ochre ought to be more generally used, for two reasons, viz.:

1st. Because it does not attract the same degree of heat that the red and dark colors do, and in warm weather the upper rooms of a house are cooler.

2d. Because the hotter the tin or metal becomes the more broken joints and greater wear and tear upon the roof, which is saved by using this light color.

My reasons for suggesting the employment of journeymen house painters, of buying the materials and having them mixed on your own premises, are, that by these means you not only effect the saving, but you also *know* that the best materials have been put on your roof, wall, or fencing, which is not always the case when a painter who has a shop is employed; for he always has *refuse* or *waste material* in the potash barrel, which he uses at the rate of one gallon of potash-barrel refuse to two gallons of oil, or two gallons of the former to one of the latter. This practice is a fraud upon the house owner, but is defended on the ground that he expects to paint his roof every fifteen or eighteen months any way, and this will, or ought to, they say, last that long. And, besides, house owners hardly ever go up on a roof to see if it has been painted; and if they did, they could not tell whether good material had been used.

I have heard of a number of instances where roof painters, knowing the dislike of parties to go up on their roofs and inspect the work, have simply painted the barge on side-board of the roof, which could be seen from the ground; and, again, where a most successful roof painter, who got the most work and the best prices for it, used rain water altogether in place of oil. He made up for the want of oil by having the largest and best list of

references and certificates, the most cheek, the most talk, and the most cringing politeness.

A traveling roof painter had the impudence to tell me to my face that I didn't know how to make money at roof painting. "Why," says he, "my paint costs about thirty cents a gallon, while yours costs nearly a dollar. A gallon of mine will paint six hundred square feet, for which I get better prices than you do. It is such a glossy, shiny black, that if I can get a man up on his roof to look at it in a week after the work is done, he is so well pleased that he will pay my bill or discount his note at once."

How did the work look in two months? I inquired. "Oh," said he, "we make it a rule never to stay in one place more than six weeks, close up our business, get all the money we can, trade our notes for merchandise, and slide on to some other locality."

Leaks result from holes rusted in the tin or other metal, from abrasion such as the falling of stones and brieks upon the roof, and principally from the want of care of the tinner in putting the roof on. These latter are badly-formed joints and seams, and are the hardest leaks to find, and the hardest to stop when found.

Here let me say, that it is better to have a poor quality of tin put on well, than to have the best put on carelessly. There is no reason why a roof made of the best tin, painted on both sides, laid on felt, with joints an inch high and with two turns properly pressed together, should not last a hundred years without leaking,—barring the leaks from accidental abrasion.

How to Find the Leaks.

Take a tape-line and go to the room where the leak shows. (See diagram 1.) Note if the room is a front or

back one. Place a piece of paper on the floor, exactly under the wet place in the ceiling "A." Now go to "B," a point just in front of the nearest corner of the chimney, to "A," and on a line with "A" (that is, the same distance from the side-wall as "A") measure distance from corner of chimney to "B," (say seven feet,) also the distance from "B" to "A" (say six feet). Better always make a little diagram on a piece of paper.

Now go on the roof (see diagram 2) and measure from the same corner of the same chimney seven feet directly in front and chalk the spot "B." Measure six feet in direction of leak "A," and mark it.

Here, generally, within a foot of this mark, if you have been correct in your measurement, you will find upon close inspection the hole which lets the water in.

DIAGRAM 1.

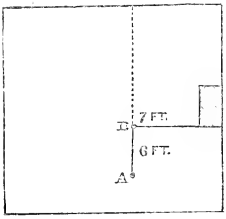
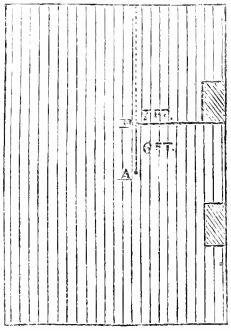


DIAGRAM 2.



If you cannot find any break in the tin, follow the dotted line "A" "B" to the upper edge of the roof, watching carefully. If you can still find no break in the tin, notice if there is a joint close to the mark "A," and

whether the joint is properly made with two turns and pressed together. If joint is properly made, and not open so as to admit water, follow this joint up to the edge of the roof, watching carefully.

In one of these ways you will generally, in a few minutes, discover the faulty place.

If you find a hole in the tin, paint it and apply the cement, leaving a bulk of cement about a quarter of an inch high right over the hole or break, and smooth down the cement with more paint.

If no hole or break is found, and the leak is from badly-formed joints, you first paint the joint or joints on both sides, and cement them on the side where the roll is, from the edge of the roll down to the roof, (generally a space about half an inch,) and extend this, if necessary, up to the upper edge of the roof, on the joints nearest the mark "A."

I recollect that there was a leak reported in a roof we had painted, and, in spite of several close examinations by myself and one of the best workmen we had, we were unable to find it. The joints were all properly made, and there was no break in the tin; of this I was certain. I noticed that when that roof was reported leaking, it was when the wind was blowing from a certain direction, and one day, when quite a rainstorm was raging and the wind blowing from that quarter, I went on the roof and stood there in the rain to watch it. To my surprise, I found that the wind banked the water up over all the joints in the neighborhood of the leak, and it actually went over the flashing,—the upright piece of tin, four inches high, which joins the roof to a higher wall and is inserted into this wall.

After the rain, I examined the roof, and found that

where the flashing run into the wall of the next house, which was higher than the roof painted, it had not been properly held in its place by plaster or cement, and when the water forced by the wind had reached this height, it had followed the tin on the under side and made the leak.

This being attended to, there was no further leaking at that point.

For all outside work, use *raw oil.* It takes longer to dry, but lasts longer.

It may here be observed, that if you employ a journeyman house painter to paint the inside work of your house, and buy the materials and have them mixed on your own premises, you will find a remarkable saving; and if the painter you employ is honest, you will have the work better done.

M. LANGHORNE,

Late President of the Roof Painters' Co., District of Columbia.

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